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Committee on Environment and Public Works

Washington, D.C.

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BUSINESS MEETING

Wednesday, May 31, 2023

United States Senate

Committee on Environment and Public Works Washington, D.C.

The committee met, pursuant to notice, at 9:47 a.m. in room 406, Dirksen Senate Office Building, the Honorable Thomas R. Carper [chairman of the committee] presiding.

Present: Senators Carper, Capito, Cardin, Sanders,
Whitehouse, Merkley, Markey, Stabenow, Kelly, Padilla, Cramer,
Lummis, Boozman, Wicker, Mullin, Ricketts.

STATEMENT OF THE HONORABLE THOMAS R. CARPER, A UNITED STATES SENATOR FROM THE STATE OF DELAWARE

Senator Carper. Good morning, everyone. I call this business meeting to order.

I want to thank everyone for joining us today as we consider the nomination of Jefferey Baran to serve as Commissioner of the Nuclear Regulatory Commission. We will also consider Senator Capito's Accelerating Deployment of Versatile Advanced Nuclear for Clean Energy, or the ADVANCE Act. As soon as a voting quorum is present, we will proceed to a vote on Jeff Baran, President Biden's nominee to serve another term as Commissioner of the Nuclear Regulatory Commission.

I want to pause for a moment to say a special thanks to you and to everybody who has worked to help shape the ADVANCE Act.

We all know we need to provide, to meet our energy needs in this Country, we need to do it in a way that does not exacerbate the challenges that we face with respect to climate. Nuclear is a great compromise.

I want to thank you very much for your work and members on both sides, and Sheldon, for your support as we have crafted this legislation.

Senator Whitehouse. Happy to do it, Chairman.

Senator Carper. Let me say a word or two if I can about Jeff Baran. Jeff Baran is a dedicated public servant who has served on the Nuclear Regulatory Commission since 2014.

Throughout his time on the NRC, he has demonstrated his commitment to ensuring the safety and security of our Nation's use of nuclear energy and materials.

Commissioner Baran has also advanced America's energy security and efforts to slow climate change through the Commission's work to establish the right regulatory framework for the safe licensing and operation of new carbon-free technologies. This includes the next generation of nuclear reactors and fusion energy systems.

In addition, Commissioner Baran understands that his job is to serve the public, the people of this Country. He has focused on providing opportunities for engagement and input from all stakeholders, especially those in disadvantaged and underserved communities.

Finally, maintaining a full slate of commissioners will help the NRC continue to carry out its responsibilities effectively and efficiently. With that in mind, I will vote yes on Jeff Baran's nomination. I urge my colleagues to do the same.

With that said, Senator Capito, let me yield to you for anything you would like to share with us. Again, thank you for your leadership on this.

[The prepared statement of Senator Carper follows:]

STATEMENT OF THE HONORABLE SHELLEY MOORE CAPITO, A UNITED STATES
SENATOR FROM THE STATE OF WEST VIRGINIA

Senator Capito. Thank you, Chairman Carper. I want to begin by saying the news we got over the week is happy/sad for us, to know that you are going to be joining Senator Cardin into a better life, and that is life after the Senate.

[Laughter.]

Senator Capito. I do want to pay tribute to your service, but I will do that as we move through the year, because you are not going anywhere.

Senator Carper. So many people have been so kind in the last week. If I had known folks were going to be that nice, I might have recessed earlier.

[Laughter.]

Senator Capito. The one thing I will say is we have a lot in common. We are both native West Virginians, as we both remark about our love for our State. But also through your entire service, you have served on this committee. That is the same with me, although my service is much shorter than yours.

So I will move to the issues at hand. Nuclear energy is critical to strengthening our energy and national security, providing for energy reliability and achieving our environmental goals. Our geostrategic rivals are offering long-term nuclear energy deals to establish energy dependent relationships around

the globe and dominate the nuclear energy landscape into the 21st century.

America can and should lead in nuclear energy, and that is why I introduced the ADVANCE Act. The ADVANCE Act is bipartisan, with 16 cosponsors. The Chairman is on the bill, Senator Lummis, Senator Whitehouse, Senator Ricketts, Senator Cardin, Senator Graham and Senator Kelly, all members of this committee. It will assert America's global leadership in nuclear energy.

The legislation will assist States like my home State of West Virginia to repurpose brownfields sites by deploying advanced nuclear reactors at previously developed facilities like decommissioned conventional power plants. The bill incentivizes nuclear innovators to rapidly develop new technologies.

The bill requires the Nuclear Regulatory Commission to identify and resolve key regulatory issues like advanced manufacturing and construction techniques, advanced nuclear fuel licensing and non-electric uses of nuclear to enable greater use of technologies. It extends a key Federal policy to provide backstop insurance coverage to help deploy more nuclear energy. The bill reduces excess regulatory costs and cumbersome red tape.

The Carper-Capito manager's amendment makes targeted

improvements to the introduced bill based on the bipartisan feedback that we got from our colleagues. The amendment supports early licensing work to enable the deployment of advanced nuclear reactors at critical national security infrastructure sites. The amendment adds clarity to the NRC's new authority to hire and retain expert staff, to ensure licensing reviews are successfully completed.

In short, the bipartisan ADVANCE Act will jumpstart the deployment of new, safe, and reliable nuclear technologies. As The ADVANCE Act moves forward, I hope we will continue to work together to incorporate additional bipartisan policies that arise to enable efficient, safe licensing reviews.

The NRC is tasked with licensing and regulating nuclear material to ensure reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, protect the environment, and improve the general welfare. Advancement of the NRC's important mission is why I so strongly support the aptly named ADVANCE Act, but why I oppose the other business item we are considering today, which is the renomination of Jeff Baran to serve as a commissioner.

We stand at a pivotal moment, ready to accelerate the liftoff of new advanced reactors and renew American leadership in nuclear. Unfortunately, Commissioner Baran is not the right fit for this moment. NRC commissioners establish the standards

and safety regulations to enable America's nuclear companies to fulfill our Nation's established nuclear energy policy goals.

Since Commissioner Baran joined the Commission in 2014, he has pursued policies supporting his regulatory philosophy. That philosophy has frustrated, I believe, the mission of the NRC. He has called for unjustifiably increasing regulatory burdens and reducing regulatory predictability. His record supports ratcheting up regulations and associated compliance costs to really no useful end.

During his renomination hearing, he tried to distance himself from that record, espousing priorities that are 180 degrees removed from how he actually voted during his two terms as a commissioner.

I am considering his renomination based on his record and continued service of Commissioner Baran on the Commission, in my view, would impede America's advancement toward a future of nuclear energy leadership to the benefit of Russia's and China's geostrategic plans, and would limit access to clean baseload generation at home and abroad.

So for these reasons, I cannot support and urge my colleagues to oppose Commissioner Baran's nomination. I thank the Chairman for scheduling this business meeting.

[The prepared statement of Senator Capito follows:]

Senator Carper. You bet. Happy to do it.

Senator Capito. I would like unanimous consent to enter letters of support from more than 30 labor-environmental NGOs and business groups and a letter of support from American Nuclear Insurance.

Senator Carper. Without objection, so ordered.

[The referenced information follows:]

Senator Carper. We are awaiting the arrival of Senator Fetterman. We will vote right away on the nomination of the NRC Commissioner.

I want to take just a minute until Senator Fetterman arrives here just to mention a couple of other things on the ADVANCE Act. As our Nation's largest source of reliable, carbon-free electricity, nuclear energy is critical to meeting our climate goals and maintaining our energy security.

This bipartisan legislation will help the United States remain a clean energy leader by providing the certainty needed to safely deploy the next generation of nuclear reactors and fuels. The bill will also aid tribal communities and communities facing economic challenges associated with retired nuclear plants and stranded waste.

Additionally, the ADVANCE Act will help ensure that the Nuclear Regulatory Commission has the tools and workforce to keep our current reactors safe and to efficiently review new nuclear technologies.

Preserving and expanding our Nation's use of clean and reliable nuclear energy is also essential for our economic and for our national security interests. This bill will help strengthen the U.S. nuclear supply chain infrastructure and will support the export of American nuclear technologies, benefiting the domestic industrial base and filling a vacuum that would

likely otherwise be filled by China and Russia.

I thank Senator Capito and Senator Whitehouse again for their leadership and collaboration on this legislation. I want to thank everybody on this committee who has participated in crafting this bipartisan legislation. I urge our colleagues to join us in voting yes on this bill.

We are still awaiting the arrival of Senator Fetterman. Senator Whitehouse, please.

Senator Whitehouse. Let me just say some quick thanks to you, and to Ranking Member Capito. I think this is the fourth nuclear reform bill that I have worked on in a bipartisan fashion. I want to recognize Senator Barrasso and Senator Crapo, who have done good work in this space as well. Senator Capito has really been a terrific partner and I want to thank her for this.

Chairman, your work has been really exemplary, not only supporting us in the design of the bill but also putting together the manager's amendment that will enhance smooth passage forward of the measure. Much appreciation to the both of you. Let's hope for a good day on the committee.

Senator Carper. All right. Senator Sanders?

Senator Sanders. Senator Carper, any way that we could start the vote?

Senator Carper. Yes, we are going to start the vote on the

ADVANCE Act, I think. Okay. I now call up S. 1111, the ADVANCE Act. In early April, I joined Senator Capito and Senator Whitehouse in co-leading the introduction of the bipartisan ADVANCE Act.

Over the following weeks, Senator Capito and I worked to refine that legislation, with the help of a lot of you. Those refinements are embodied in an amendment in the nature of a substitute, which I circulated yesterday morning. This amendment represents non-controversial changes from the legislation as introduced. By unanimous consent, the Carper-Capito amendment in the nature of a substitute is considered to be the base text for the purpose of today's markup.

Is there any objection? Hearing none, so ordered.

[The text of the amendment follows:]

Senator Carper. Does any Senator wish to offer an amendment to this legislation?

Senator Lummis. Mr. Chairman?

Senator Carper. Yes, please.

Senator Lummis. I would like to call up Lummis Amendment
No. 1. This amendment is simple. It clarifies that two Federal
agencies should not be doing the exact same environmental
analysis on a project. This is a classic example of government
waste and duplicity.

In my home State of Wyoming, we are having this TerraPower project that is planned to build a new advanced reactor called Natrium at a retired coal-fired power plant in Kemmerer, Wyoming. The Nuclear Regulatory Commission is already licensing this site and doing the NEPA analysis.

Unfortunately, a totally new office at the Department of Energy, the Office of Clean Energy Development, established under the recent Bipartisan Infrastructure Law, stepped in and asserted that they needed to do their own environmental analysis of the project, rather than deferring to the NRC. This is duplicative. It is wasteful, and an unnecessary delay of a project that I believe both sides support.

I won't be requesting a vote on this amendment, but I do hope to highlight exactly why permitting reform is necessary. I am proud to support the underlying bill as a cosponsor. I

appreciate Ranking Member Capito and her staff as well as you, Mr. Chairman, for your work on this legislation.

I withdraw my amendment.

Senator Carper. Thank you so much.

Other amendments, please? Hearing none, the Clerk will call the roll on the ADVANCE Act, please.

The Clerk. Mr. Boozman?

Senator Boozman. Yes.

The Clerk. Ms. Capito?

Senator Capito. Yes.

The Clerk. Mr. Cardin?

Senator Cardin. Aye.

The Clerk. Mr. Cramer?

Senator Cramer. Aye.

The Clerk. Mr. Fetterman?

Senator Carper. Aye by proxy.

The Clerk. Mr. Graham?

Senator Capito. Aye by proxy.

The Clerk. Mr. Kelly?

Senator Kelly. Aye.

The Clerk. Ms. Lummis?

Senator Lummis. Aye.

The Clerk. Mr. Markey?

Senator Markey. No.

The Clerk. Mr. Merkley?

Senator Merkley. No.

The Clerk. Mr. Mullin?

Senator Mullin. Yes.

The Clerk. Mr. Padilla?

Senator Padilla. Yes.

The Clerk. Mr. Ricketts?

Senator Ricketts. Aye.

The Clerk. Mr. Sanders?

Senator Carper. No, by proxy.

The Clerk. Ms. Stabenow?

Senator Stabenow. Aye.

The Clerk. Mr. Sullivan?

Senator Capito. Aye by proxy.

The Clerk. Mr. Whitehouse?

Senator Whitehouse. Aye.

The Clerk. Mr. Wicker?

Senator Wicker. Yes.

The Clerk. Mr. Chairman?

Senator Carper. Aye.

The Clerk will report.

The Clerk. Mr. Chairman, the yeas are 16, the nays are 3.

Senator Carper. The legislation has been favorably

reported. I am grateful to everyone who came and stayed. We

still have some work ahead of us on the Nuclear Regulatory

Commission nominee. Maybe we can take care of that off the

Floor today. We will see if that can be worked out. That would
be good.

I think we can probably let people go now. For anyone who wants to stay and make statements for the record, you are more than welcome. Anybody who wants to stay and share remarks, that will be fine. Senator Markey, I understand you may have something you would like to say. You are more than welcome to do that.

Senator Markey. Thank you, Mr. Chairman, very much. I understand, Mr. Chairman, that this legislation is important to many members of the committee. But we should not give a boost to the nuclear industry without commensurately confronting the longstanding issues of how to deal with nuclear waste and nuclear decommissioning.

Senator Carper. The hearing will be in order, please.

Senator Markey. If we support new plants with reactors without addressing the needs of operating reactors and affected communities, we will be adding radioactive fuel to a fire and making our existing problems worse.

The ADVANCE Act takes unprecedented steps to have the Nuclear Regulatory Commission promote nuclear exports, not simply nuclear safety, which is its core mission, all to prop up

the ailing U.S. nuclear industry at home and abroad. I remain deeply concerned about this extension of the Nuclear Regulatory Commission's mission. It is supposed to be a regulator.

Other agencies are supposed to be promoting American commerce. That is not the job of the Nuclear Regulatory Commission. Its job is to promote safety, it is to ensure these plants are safe.

That is what happened back in 1974, we broke the Nuclear Regulatory Commission off from the Atomic Energy Commission, so there would be separate missions, separate goals, separate responsibilities. Now to turn the Nuclear Regulatory Commission into an agency that is promoting a technology it is supposed to be regulating begins to blur this role, especially as we are talking about exports overseas.

I am also concerned that in Section 103 of this legislation it could allow the NRC to skirt the critical non-proliferation safeguards in this bill, and unilaterally approve an export license for foreign countries to receive nuclear materials.

That could present a significant non-proliferation risk and put a domestic nuclear safety agency in charge of important national security decisions.

With all due respect to the Nuclear Regulatory Commission, the Commission was never meant to be in the business of deciding if Saudi Arabia gets nuclear materials. We are blurring the

historic role that this agency plays. This legislation is not wise. We have to keep these lines strong.

Moreover, I am concerned that Section 104 has an overly expansive definition of embarking civil nuclear nations. We need to be much more cautious when exporting such risky and dangerous technologies. While some of the bill's supporters argue we need new nuclear technologies to combat the climate crisis, I have an arched eyebrow as to why this bill focuses solely on nuclear energy and not on other zero-emissions technologies, such as wind and solar and geothermal, which is what our Country should be promoting around the rest of the world.

It is also shortsighted to me to make such a Herculean effort to promote new nuclear technologies when we are yet to solve the longstanding problems resulting from our existing nuclear fleet. To this day, the Navajo Nation is dealing with a legacy of uranium contamination, including more than 500 abandoned uranium mines, and homes and water sources polluted with elevated levels of radiation.

While Section 405 of the ADVANCE Act acknowledges this ongoing concern, the funding authorized in this legislation will not address the full legacy of radioactive pollution. Providing a capped level of authorized funding for communities dealing with this radioactive legacy contrasts greatly with Section 202

of the bill, which allows for nuclear companies to receive an uncapped award for licensing costs.

So it is deeply disappointing to me that we are capping costs for cleanup, but not capping prizes for technologies that will likely rely on uranium, which caused this pollution in the first place.

Additionally, while this bill provides some funding to assist communities impacted by the closure of impending nuclear power plants, it does not include legislative proposals that would fully address the concerns of communities struggling to overcome the social and economic burden of indefinitely hosting stranded nuclear waste, when there is no long-term storage solution in sight.

Our communities have become de facto nuclear storage facilities, endangering them, their families, and the environment. These communities, including those in Massachusetts around the Pilgrim Nuclear Power Station, deserve more funding, a meaningful say in the decommissioning process, and a real pathway to consent-based, long-term storage for our Nation's spent nuclear fuel.

That is why I have supported and introduced legislation in the past like the Nuclear Waste Task Force Act and the Dry Storage Act and Senator Sanders' Nuclear Plant Decommissioning Act.

Chairman Carper, I want to work with you as we move forward between here the Floor. I think that there are many problems with this legislation. There are real nuclear non-proliferation issues here. We know that there are countries around the world, including Saudi Arabia, that have potential instability and we don't want to wind up in a situation where nuclear power plants have been sold to North Korea, which then turn into nuclear bomb factories, or nuclear power plants that have been sold to Iraq, which then turn into nuclear bomb factories.

Or in the instance of Iran, we were going to sell six nuclear plants to Iran in the late 1970s, and had already finished that deal before the Shah of Iran fell. Can you imagine if they had six nuclear power plants that had already been constructed with U.S. aid in the 1970s before the Shah fell? That is what we are talking about here.

I just want to make sure we understand that as we are going to become nuclear Johnny Appleseeds and encouraging the Nuclear Regulatory Commission to be promoting this nuclear technology around the world, with lower safeguards in terms of what the protections are, then yes, in the short term, the nuclear industry will reap the financial benefits of it. But inevitably, inexorably, the world will reap the whirlwind, and the next ayatollah or equivalent somewhere in the world would then have access to the nuclear materials that could hold the

whole world hostage.

So from my perspective, I just think a lot more thought has to go into this legislation. Safeguards have to be included. I just want to have an opportunity to be able to work with you, Mr. Chairman, and the Ranking Member, to build in those safeguards.

Senator Carper. Thank you, Senator Markey.

Let me say, while I don't fully agree with your characterization of the legislation, I hear your concerns. Your staff has shared those with us as well, and shared those concerns with Senator Capito's staff. We look forward to finding, if we can, ways to address our Nation's growing nuclear spent fuel and ways to ensure that we have an effective and efficient decommissioning process that helps us safely when needed to close a nuclear site. I commit to working with you on those issues.

Senator Merkley?

Senator Merkley. Thank you, Mr. Chairman. I think my colleague from Massachusetts has laid out and summarized more eloquently than I can concerns that I do have. I do want to emphasize that blurring the distinction between export promotion and nuclear safety is a huge mistake.

We have nations that very much want nuclear technology, and my colleagues has mentioned Saudi Arabia. Saudi Arabia does not

want the gold standard, they do not want international supervision. We have to remember that there is a Shi'ite force, major force, in the Islamic world, and there is a Sunni force. Those two countries, Iran and Saudi Arabia, are in competition with each other.

And here we are, putting extraordinary restrictions on Iran, which I have supported, although I would have liked to have seen the deal that really dismantled their operations sustained, a massive mistake that increased risks in the world, for the Trump Administration to exit that agreement.

But we seem to feel like there is some massive difference with Saudi Arabia. We should remember that there is no way Iran is not going to pursue a weapon if Saudi Arabia is pursuing a weapon. And Saudi Arabia is much more on that track than Iran is, ironically. They are also developing the missiles to deliver it.

So we should be very careful about taking a safety organization that has integrity, that has responsibility, that has clarity on safety and say that they should promote the export of nuclear technology. There are far more complicated issues in the world. We should not blur that distinction.

Saudi Arabia is not on the banned list here, and there is no condition about the gold standard that we have previously promoted if we were to export, so that we would not end up

essentially putting them on the track that we are saying that Iran, that we do not want Iran to go down.

So I have supported the development of small nuclear reactors, knowing that we have solved neither the nuclear weapon nor the dirty bomb problem, simply because I felt like the research on an ultimate safe reactor was extremely important in a world in which we are facing climate change. But how and when these are deployed, when they could create risks in international affairs that include dirty bomb risks and nuclear bomb risks, should never be confused with the issue of safety done by the nuclear agency, the Nuclear Regulatory Commission.

So I share a lot of my colleague's concerns.

Senator Carper. I thank you both for your thoughtful comments. I yield to the author of the legislation, Senator Capito.

Senator Capito. Thank you, Mr. Chairman. I take the gentleman's concerns into consideration. We had a very overwhelming vote in committee, 16 to 3. I think that shows the desire of the members of the committee to move forward on this technology and to move forward on the development of the technologies. I mentioned in my statement that we will be hopefully working this bill further, as hopefully we can get to the Floor, and we will have conversations with your staffs.

I would say the mission of the Nuclear Regulatory

Commission is safety. That is number one. Any time they are before our committee, any time we have talked with them, that is their number one mission. And they espouse it, not just espouse it, practice it, and verbalize that every single time they are in front of our committee. So I am sure with the ADVANCE Act that would be front and center as well.

I do think that if we as a country can become the chief technologist, the chief developer, the chief innovator of these smaller, modular reactors, we can lead the world. And we can put safeguards in, if that is what the desire of the committee would be.

So I appreciate your concern. I know the waste is a concern. But I do think, and remember where I am from, I am from a State that generates a lot of natural gas and coal and has for 100 years at least. Every day I hear how everything needs to be cleaner and greener. This technology would lead us to that, and provide us with a baseload energy source and could recommission areas in my State and other States, thereby helping us with job loss and other things that are connected with it as we are moving forward.

So let's just keep working on it together. I appreciate your staying later and giving us your thoughts. Thank you.

Senator Carper. Senator Markey.

Senator Markey. The problem is this. There is a dual

identity to nuclear energy. In the hands of some, it has this incredible ability to generate electricity. But it has this unfortunate side product of uranium and plutonium.

But in the eyes of others, it has this incredible ability to give access to plutonium and uranium, but it has a wonderful side benefit of electricity as well. That is what those countries, those individuals, will be trying to focus on.

Because of its dual identity, we have to be very careful. We haven't solved the nuclear waste problem in our own country. We don't want uranium and plutonium in other countries in the world without full scope safeguards. If we are going to be exporting and we are going to be promoting these technologies, then we have to promote the gold standard. We have to promote full scope safeguards.

That is where we need the leadership. We are not going to be the leader on the technology, but we can be the leader on the values that we attach to the technology, the standards that we attach to the technologies, the goals that we have for our planet and our society for these technologies. That is what is missing here.

So I just want to make sure that as we are going forward that we have a full discussion about that. We have to be speaking with a loud, clear voice about what our expectations are, not just for ourselves but for the rest of the world as

they compete with us. Because we can't have them continually lowering their standard, and we are going to lower ours as well in terms of those safeguards, Because then we just become nuclear merchants out on the road hawking our wares.

Ultimately, at some point, maybe not five years from now or 10 or 15 or 20, there will be unfortunately a compromise of this technology. Then that generation will have to deal with the fact that we didn't build in the safeguards up front.

I am looking forward to working with you.

Senator Carper. Both Senator Capito and I and our staffs are looking forward to working with you. I want to thank both you and Senator Merkley for your thoughtful comments.

In closing, I would say achieving our economy-wide decarbonization goals requires a diverse set of solutions, as we know. Nuclear energy has an important role to play in that regard.

The ADVANCE Act builds on the actions we have taken through the Bipartisan Infrastructure Law and the Inflation Reduction Act to preserve and expand our Nation's use of nuclear energy. This bill is, I believe, an exciting step forward. I thank Senator Capito and her team very much for their leadership and collaboration on this important piece with Senator Whitehouse, my staff, and myself. I look forward to working with our Senate colleagues to pass this legislation, make it better if we can,

and send it to the President's desk.

Finally, I would like to ask unanimous consent to submit additional materials relating to the morning's votes into the record, including letters of support for the ADVANCE Act of 2023.

[The referenced information follows:]

Senator Carper. I also ask unanimous consent that the staff has the authority to make the technical and conforming changes to each of the matters approved today.

Is there objection? Hearing none, with that, this business meeting is adjourned. Thank you all.

[Whereupon, at 10:20 a.m., the business meeting was adjourned.]